How to Write a Scientific Report: 9th Grade Science Worksheet - Video 5

A scientific report is an organized way to communicate the details and findings of an experiment. It includes several important sections: the title, aim, hypothesis, materials, procedure, results, discussion, and conclusion. Each section has a specific purpose, from stating what you are investigating, to describing your process, to analyzing and explaining what you discovered. Understanding how to write each part will help you share your experiments clearly and scientifically.

Fill in the Blank: Fill in the blank with the correct words.

1. The _____ of a scientific report should summarize the experiment in about 6 to 8 words.
2. The _____ describes the purpose or goal of the experiment.
3. The _____ is an educated guess about what you think will happen in the experiment.
4. The _____ section lists all the items and amounts needed for the experiment.
5. In the _____ section, you explain and analyze your results, linking them to what you learned in class.

Word bank: procedure, discussion, title, aim, hypothesis, materials

Multiple Choice Questions: Choose the correct answer from the choices for each question.

1. What is the main purpose of the "control" in an experiment?
    - A) To make the experiment more complicated
    - B) To provide a baseline for comparison
    - C) To test the hypothesis
    - D) To change the results

2. Which section of a scientific report would you use to list the quantities of beakers or weights used?
    - A) Discussion
    - B) Materials
    - C) Conclusion
    - D) Title

3. If you describe the color or texture of an object in your results, you are using:
    - A) Qualitative data
    - B) Quantitative data
    - C) Mathematical data
    - D) Theoretical data

4. What should you do in the conclusion of your scientific report?
    - A) State new hypotheses
    - B) Restate the aim and summarize whether your hypothesis was supported
    - C) List all your materials again
    - D) Draw a picture of your results

5. Measuring the circumference of a balloon and using centimeters is an example of:
    - A) Qualitative data
    - B) Quantitative data
    - C) Hypothesis data
    - D) Control data

Open-Ended Questions: Answer the following questions in complete sentences.

1. Why is it important to be specific when listing materials in a scientific report?

2. Explain the difference between qualitative and quantitative data. Give an example of each from the balloon experiment.

3. Describe one way to improve an experiment and explain why it would help.

ANSWER KEY

Teachers, please review all AI-generated answers for accuracy, especially if math is involved.

Fill in the Blank:

1. title
2. aim
3. hypothesis
4. materials
5. discussion

Word Bank: procedure, discussion, title, aim, hypothesis, materials

Multiple Choice:

1. B) To provide a baseline for comparison
2. B) Materials
3. A) Qualitative data
4. B) Restate the aim and summarize whether your hypothesis was supported
5. B) Quantitative data

Open-Ended Example Answers:

1. It is important to be specific when listing materials so that anyone can repeat the experiment exactly the same way, using the correct sizes and quantities.
2. Qualitative data uses words to describe what happens, like saying the balloon looks smaller. Quantitative data uses numbers, like measuring the balloon's circumference in centimeters.
3. One way to improve an experiment is to repeat it multiple times. This helps make sure the results are accurate and not just a coincidence.